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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,425	06/01/2006	Susumu Yamaguchi	4600-0117PUS1	6373

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EXAMINER
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PADEN, CAROLYN A

ART UNIT	PAPER NUMBER
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1781

NOTIFICATION DATE	DELIVERY MODE
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03/14/2011

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/563,425	<b>Applicant(s)</b> YAMAGUCHI ET AL.	
	<b>Examiner</b> Carolyn A. Paden	<b>Art Unit</b> 1781	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2011.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 15-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2-24-11</u> .   | 6) <input type="checkbox"/> Other: _____                          |

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dorp (3,686,003) for reasons of record.

Van Dorp discloses flavoring foods with unsaturated aldehydes. Arachidonic acid (described as an n-6 long chain fatty acid having 20 carbon atoms that may be from vegetable oil in Applicants' Specification on page 5, third and fourth paragraph) is cited as a precursor for the unsaturated aldehyde (example 6). The precursors may also be incorporated into foods (column 2, lines 30-34) and then oxidized to provide a flavor or the precursors are oxidized and added to foods. The flavor produced is described as savory (column 1, line 32). The amount of amount of flavoring used in foods is disclosed at column 3, lines 22-35. Linolenic acid is cited as a precursor for the flavoring agent in example 12. The claims appear to differ from van Dorp in the recitation of the amount of flavoring used in the food (see column 3, lines 22-35). It would have been obvious to one of ordinary

skill in the art to include enough of the precursor arachidonic acid in a food composition in order to provide an appropriate amount of flavoring agent to food. Guidance as to the amount of arachidonic acid is provided in example 8, where more than 1% arachidonic acid is used to create flavoring for chicken soup.

The claims also appear to differ in the recitation of a specific composition that consists of vegetable fat and oil and 1% or more of n-6 long-chain highly unsaturated fatty acid as described in claim 15. At column 7, lines 68-72, a composition containing chicken fat, ethanol and 10% arachidonic acid was added to soup and the soup was simmered in water for 7 minutes. Applicant argues that chicken fat is different from vegetable fat in that it contributes to the KOKUMI flavor of the food. But Van Dorp shows also prepared a soup with chicken fat that does not contain arachidonic acid and the soup was described as having a weak flavor. Further chicken fat was not included in any of the previous examples the provided a chicken flavor. It is not see chicken fat per se is essential to the creation of the flavor of Van Dorp. Van Dorp provides for using bland fat or oil as a diluent at column 3, lines 29-35. It would have been obvious to

provide vegetable oil as an alternative diluent for the chicken fat and ethanol for arachidonic acid in the test soup of example 20.

Applicant argues that the taste prepared is KOKUMI and is not the same as a savory flavor. This argument has been considered but is not persuasive. Van Dorp uses the same method steps as the claims. The same acts in the same relation would be expected to provide the same result. The fact that the description of the resulting flavor may be different is not seen to alter the fact that the process is the same in both the claims and van Dorp.

Applicant argues that the present application is directed to producing kokumi in vegetable fat and oil. Van Dorp provides for using bland fat or oil as a diluent at column 3, lines 29-35. One would expect vegetable oil to be included in the oil of van Dorp.

Applicant points out that Van Dorp includes ethanol in his mixture with chicken fat and so the composition does not consist of the specific ingredients called for in the claims. This has been considered but does not overcome the rejection. Van Dorp provides for using bland fat or oil as a diluent at column 3, lines 29-35. It would have been obvious to substitute vegetable oil as an alternative

diluent for the chicken fat and ethanol for arachidonic acid in the test soup of example 20.

Applicant argues that the vegetable oil in van Dorp is not a diluent but contributes to the KOKUMI flavor. Vegetable oil is known in the art to contain a variety of fatty acids that might include arachidonic acid and linolenic acid that would be expected to provide a source of aldehydes for the preparation of flavoring components. One of ordinary skill in the art, with knowledge of the composition of vegetable oils would expect that heating the edible, bland oil in van Dorp to supplement and further enrich the flavor of the composition.

Claims 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over van Dorp as applied to claims 15-17 above, and further in view of Kiritsakis for reasons of record.

van Dorp further disclosed aldehydes are useful flavoring ingredients (abstract). Flavoring ingredient including aliphatic aldehydes having from 11-17 carbon atoms and 2-4 double bonds are shown in the abstract of van Dorp. Trideca-2,4,7-trienal is cited as one of the products (column 1, line 43). The use of fat or oil as a diluent for the flavoring is disclosed at column 3, lines 29-35.

The claims appear to differ from van Dorp in the preparation of a flavoring ingredient that contains all of the ingredients of the claims that is made by heating the composition. In example 20 the soup is simmered in water for 7 minutes to provide a flavored composition. One of ordinary skill in the art would expect some of the arachidonic acid to decompose to provide the flavorful aldehydes.

Claims 19-20 appears to differ from van Dorp in the recitation of a vegetable oil having specific aldehydes, ketones and alcohols. Kiritsakis teaches that the flavor components of olive oil contain a variety of ketones and alcohols, as shown on table 7. In particular hexanal, heptane-2-one and alcohol are mentioned. It would have been obvious to one of ordinary skill in the art to use olive oil as a diluent for the flavoring of van Dorp to include an olive oil flavor flavoring of van Dorp. It is appreciated that the specific alcohol of claim 21 is not mentioned but if one of ordinary skill in the art wanted to optimize the flavor of the food, it would have been obvious to modify the flavor with the alcohol of the claim.

Applicant argues that examiner provides no explanation as to how one would optimize the flavor of a food by adding aldehydes, alcohols or ketones. Van Dorp found aldehydes and alcohols as

decomposition products of arachidonic acid but did not mention any short chain breakdown products of claims 19-20. It is the examiners position that olive oil would optimize the flavor of the Van Dorp by providing a complex array of flavoring ingredients to the flavoring composition. It is appreciated that the specific alcohols of claim 21 are not mentioned but the alcohols of claim 18 are a suggested alternative to the aldehydes and ketones in the vegetable oil. The fact that Kiritsakis did not find them in olive oil is not seen to overcome the rejection.

Van Dorp teaches that alcohols are precursors for the flavorful aldehydes (column 1, lines 62-63). Octyl alcohol is a suggested precursor mentioned at column 2, line 14. The fact that they are not mentioned in van Dorp is not an indication that they would not be present in the composition, particularly when one would have any and all levels of decomposition products from arachidonic acid and gamma linoleic acid (example 12) to select from in creating the flavorful composition.

Applicant argues that one of ordinary skill in the art would not expect olive oil to modify the flavor of van Dorp. Kiritsakis teaches that the aldehydes, alcohols and ketones of olive oil have a flavor



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(page 673, column 2 and Table 1 on page 674). It would have been obvious to modify the flavor of van Dorp with the olive oil of Kiritsakis to create a complex flavor.

Applicant argues that olive oil contains natural flavor components and not decomposed substances. Claim 18 requires that the vegetable oil have aldehydes, ketones or alcohols.

Applicant argues that the decomposed substance is obtained by heating. Van Dorp is cited to provide a decomposed flavor substance the in provided by heating.

The rejection of the claims over Simmons has been withdrawn in response to applicants' arguments.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn A Paden whose telephone number is (571) 272-1403. The examiner can normally be reached on Monday to Friday from 7 am to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached by dialing 571-272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Carolyn Paden/

Primary Examiner 1781